

Enron POI Detection Selection Chart

	GuassainNB		Decision Tree		Random Forest		AdaboostDTC		PCA-DTC		Tuned-PCA-DTC:								Average Delta Score	
	Precision	Recall	Precision	Recall	Precision	Recall	Precision	Recall	Precision	Recall	Precision	Recall							Negative Scores indicates that feature Adversely affects classifiers	
All Features (22 Features)	0.14904	0.842	0.26385	0.25	0.42205	0.134	0.26854	0.248	0.23669	0.26	0.23017	0.206								
Correlated > 0.2 (13 Features)	0.24739	0.3205	0.27283	0.245	0.46176	0.163	0.2525	0.227	0.26826	0.2975	0.27315	0.2965								
Correlated > 0.2 Remove 'Total Stock Value'	0.2478698	0.32	0.2780514	0.254	0.4829629	0.163	0.2804054	0.249	0.2348297	0.238	0.2378167	0.244	0.000	-0.01	-0.02	-0.04	0.092	0.087	0.007620515117	
Correlated > 0.2 Remove 1 'expenses'	0.2468232	0.3205	0.2397727	0.211	0.4151472	0.148	0.2318514	0.206	0.2855100	0.2995	0.2782567	0.2905	0.000	0.081	0.082	0.091	-0.11	-0.08	0.1440147904	
Correlated > 0.2 Remove 2 'loan_advances'	0.3734939	0.31	0.2343400	0.2095	0.4597402	0.177	0.2356828	0.214	0.2538787	0.27	0.2571294	0.275	-0.11	0.006	-0.07	-0.01	0.061	0.036	-0.1335311077	
Correlated > 0.2 Remove 3 'shared_receipt_w	0.3864343	0.3105	0.2287117	0.2095	0.4205256	0.168	0.2276785	0.204	0.2619289	0.258	0.2751879	0.2745	-0.01	0.005	0.048	0.018	0.003	-0.01	0.06235649954	
Correlated > 0.2 Remove 4 'total_payments'	0.4359775	0.349	0.2613318	0.2335	0.4105534	0.1595	0.2444703	0.21	0.2784877	0.2615	0.2796564	0.2605	-0.08	-0.05	0.018	-0.02	-0.02	0.009	-0.1690415303	
Correlated > 0.2 Remove 5 'restricted_stock'	0.4533073	0.3495	0.2736209	0.2505	0.4857916	0.1795	0.2751937	0.2485	0.3384791	0.296	0.3367697	0.294	-0.01	-0.02	-0.09	-0.06	-0.09	-0.09	-0.3060720719	
Correlated > 0.2 Remove 6 'shared_poi_ratio'	0.4637588	0.3615	0.2788671	0.256	0.4386206	0.159	0.2853361	0.2695	0.3056008	0.281	0.3059411	0.2755	-0.02	-0.01	0.067	-0.03	0.047	0.049	0.05120926627	
Correlated > 0.2 Remove 7 'long_term_incenti	0.4772263	0.351	0.2779677	0.2845	0.4798439	0.1845	0.2718916	0.281	0.3871490	0.3585	0.3843222	0.353	-0.00	-0.02	-0.06	0.001	-0.15	-0.15	-0.2543951074	
Correlated > 0.2 Remove 8 'deferred_income'	0.4555808	0.3	0.2849137	0.3305	0.4562162	0.211	0.2944997	0.34	0.3632050	0.3445	0.3575916	0.3415	0.072	-0.05	-0.00	-0.08	0.037	0.038	-0.02683697305	
Correlated > 0.2 Remove 9 'to_poi_ratio'	0.5031152	0.323	0.3252544	0.3355	0.4974823	0.247	0.3326867	0.343	0.4298963	0.394	0.4406405	0.399	-0.07	-0.04	-0.07	-0.04	-0.11	-0.14	-0.3505194629	
Correlated > 0.2 Remove 10 'salary'	0.4858131	0.351	0.3644148	0.383	0.5852941	0.2985	0.3676748	0.389	0.4416941	0.4015	0.4310344	0.4	-0.01	-0.08	-0.13	-0.08	-0.01	0.008	-0.3369559552	
Correlated > 0.2 Remove 11 'bonus'	0.4688869	0.2675	0.2156424	0.193	0.3295880	0.176	0.2192837	0.199	0.2201533	0.201	0.2188864	0.2005	0.100	0.338	0.378	0.338	0.422	0.411	1.577836636	
Correlated > 0.2 Remove 12 'total_stock_valu	0.4605451	0.321	0.2743362	0.31	0.2691190	0.278	0.2743362	0.31	0.2743362	0.31	0.2743362	0.31	-0.04	-0.17	-0.04	-0.16	-0.16	-0.16	-0.5916186124	
Removed 7 Adverse Features, Test Remaining 6																				
6 Features Selected	0.4123774	0.3365	0.3588596	0.321	0.5768194	0.214	0.3641774	0.3365	0.2905679	0.2865	0.2902574	0.2875								
Remove from Bottom 1 'expenses'	0.4227188	0.3405	0.4038954	0.394	0.5554347	0.2555	0.4112008	0.4075	0.2914937	0.281	0.3044838	0.292	-0.01	-0.11	-0.02	-0.11	0.004	-0.01	-0.2659416156	
Remove from Bottom 2 'shared_receipt_with_	0.4824624	0.337	0.2838405	0.2705	0.4631463	0.2105	0.2728690	0.2625	0.3196808	0.3005	0.3169572	0.3	-0.05	0.243	0.137	0.283	-0.04	-0.02	0.5602445005	
Remove from Bottom 3 'deferred_income'	0.4678076	0.287	0.3123993	0.291	0.5517241	0.264	0.3217115	0.3045	0.3689526	0.347	0.3690349	0.348	0.064	-0.04	-0.14	-0.09	-0.09	-0.10	-0.3130962967	
Remove from Bottom 4 'to_poi_ratio'	0.4853700	0.282	0.3400163	0.4155	0.5171486	0.3845	0.3280926	0.3965	0.4123601	0.387	0.4091869	0.3875	-0.01	-0.15	-0.08	-0.09	-0.08	-0.07	-0.4323924572	
Remove from Bottom 5 'bonus'	0.4605451	0.321	0.2743362	0.31	0.2746615	0.284	0.2743362	0.31	0.2743362	0.31	0.2743362	0.31	-0.01	0.171	0.342	0.140	0.215	0.212	0.8552723137	
6 Features Selected	0.4123774	0.3365	0.3588596	0.321	0.5768194	0.214	0.3641774	0.3365	0.2905679	0.2865	0.2902574	0.2875								
Remove from Top 1 'bonus'	0.3964497	0.3015	0.3519788	0.3335	0.4397590	0.1825	0.3412572	0.323	0.3108808	0.3	0.3100734	0.2955	0.050	-0.00	0.168	0.036	-0.03	-0.02	0.2164762719	
Remove from Top 2 'to_poi_ratio'	0.3401015	0.1675	0.3603559	0.3645	0.4279918	0.211	0.3610705	0.371	0.3077322	0.2965	0.3082549	0.295	0.190	-0.03	-0.01	-0.06	0.006	0.002	0.07307362254	
Remove from Top 3 'deferred_income'	0.3340635	0.1525	0.2492239	0.281	0.3466819	0.1515	0.2504347	0.288	0.3329994	0.3325	0.3291457	0.3275	0.021	0.194	0.140	0.193	-0.06	-0.05	0.4888484245	
Remove from Top 4 'shared_receipt_with_poi'	0	0	0.2983835	0.3415	0.3014996	0.191	0.3040069	0.349	0.3144876	0.3115	0.3143712	0.315	0.486	-0.10	0.005	-0.11	0.039	0.027	0.3075258975	
Remove from Top 5 'expenses'	0	0	0.1330816	0.141	0.1529152	0.139	0.1330816	0.141	0.1330816	0.141	0.1330816	0.141	0	0.365	0.200	0.378	0.351	0.355	1.297217562	
Identify Adverse Features																				
Selected 6 Features from Iterations	0.4123774	0.3365	0.3588596	0.321	0.5768194	0.214	0.3641774	0.3365	0.2905679	0.2865	0.2902574	0.2875								
Remove Individual from Bottom 1 'expenses'	0.4227188	0.3405	0.3987730	0.39	0.5580110	0.2525	0.4111392	0.406	0.2952674	0.287	0.2994845	0.2905	-0.01	-0.10	-0.01	-0.11	-0.00	-0.01	-0.2646075976	
Remove Individual from Bottom 2 'shared_rec	0.4837110	0.3415	0.3533007	0.289	0.5693641	0.197	0.3441558	0.2915	0.3182291	0.3055	0.3195235	0.3085	-0.07	0.037	0.024	0.065	-0.04	-0.05	0.004041042313	
Remove Individual from Bottom 3 'deferred_in	0.3719692	0.3145	0.4143356	0.3555	0.5604681	0.2155	0.4039145	0.3405	0.3821689	0.3665	0.3874207	0.3665	0.062	-0.08	0.014	-0.04	-0.17	-0.17	-0.2280545738	
Remove Individual from Bottom 4 'to_poi_ratio	0.4510833	0.3435	0.3521784	0.3395	0.4822451	0.2105	0.3588390	0.34	0.3673901	0.347	0.3621593	0.3455	-0.04	-0.01	0.098	0.001	-0.13	-0.12	-0.09493415003	
Remove Individual from Bottom 5 'bonus'	0.4843636	0.333	0.3905555	0.3515	0.5453431	0.2225	0.3777173	0.3475	0.3669994	0.3125	0.3666472	0.3155	-0.06	-0.06	0.022	-0.02	-0.10	-0.10	-0.2346771366	
Remove Individual from Bottom 6 'exercised_	0.3964497	0.3015	0.3548046	0.336	0.4367088	0.1725	0.3504452	0.3345	0.3085655	0.299	0.3091482	0.294	0.050	-0.01	0.181	0.015	-0.03	-0.02	0.2068279947	
Remove 'expense' First of the 3 Identified Features																				
Sans 'expenses' 5 features	0.4227188	0.3405	0.3987730	0.39	0.5580110	0.2525	0.4111392	0.406	0.2952674	0.287	0.2994845	0.2905								
Remove Individual from Bottom 2 'shared_rec	0.4824624	0.337	0.2886327	0.2755	0.4593406	0.209	0.2773417	0.265	0.3158738	0.2955	0.3219616	0.302	-0.05	0.224	0.142	0.274	-0.02	-0.03	0.5562581533	
Remove Individual from Bottom 3 'deferred_in	0.3821405	0.291	0.4401294	0.408	0.5319767	0.2745	0.4346174	0.4005	0.3524667	0.3715	0.3433190	0.361	0.090	-0.05	0.004	-0.01	-0.14	-0.11	-0.1249213766	
Remove Individual from Bottom 4 'to_poi_ratio	0.4450227	0.342	0.3326403	0.32	0.5107212	0.262	0.3293506	0.317	0.3255330	0.313	0.3261441	0.31	-0.02	0.136	0.037	0.170	-0.05	-0.04	0.2646415718	
Remove Individual from Bottom 5 'bonus'	0.5233918	0.358	0.3773245	0.3145	0.4754273	0.2225	0.3700361	0.3075	0.4413875	0.369	0.4364508	0.364	-0.11	0.096	0.112	0.139	-0.22	-0.21	0.002842234993	
Remove Individual from Bottom 6 'exercised_	0.4783861	0.332	0.4376845	0.3705	0.5152173	0.237	0.4522584	0.3955	0.3451276	0.2975	0.3529069	0.3035	-0.04	-0.01	0.058	-0.03	-0.06	-0.06	-0.09926459136	
Sans 'deferred_income', from sans 'Expense'	0.3821405	0.291	0.4439631	0.41	0.5228628	0.263	0.4334600	0.399	0.3549160	0.37	0.3498334	0.3675								

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Remove Individual from Bottom 2 'shared_rec	0.4678076	0.287	0.3102522	0.289	0.5334706	0.259	0.3134962	0.295	0.3668763	0.35	0.3691239	0.3455	-0.08	0.254	-0.00	0.223	0.008	0.002	0.3984394801	
Remove Individual from Bottom 4 'to_poi_ratio	0.4074074	0.2805	0.3605700	0.3795	0.5744234	0.274	0.3693779	0.386	0.4303126	0.406	0.4227513	0.3995	-0.01	0.113	-0.06	0.077	-0.11	-0.10	0.002251047154	
Remove Individual from Bottom 5 'bonus'	0.5019493	0.2575	0.4496996	0.2995	0.4912099	0.2375	0.4402467	0.2855	0.5461035	0.459	0.5482509	0.4545	-0.08	0.104	0.057	0.106	-0.28	-0.28	-0.09786651613	
Remove Individual from Bottom 6 'exercised_	0.3137254	0.184	0.4802065	0.4185	0.4827235	0.2375	0.4795008	0.4035	0.3339755	0.26	0.3389283	0.2625	0.175	-0.04	0.065	-0.05	0.130	0.115	0.2767105687	
Remove 'deferred_income' Second of the 3 Identified Features																				
Sans 'deferred_income' 5 features	0.3719692	0.3145	0.4194865	0.3595	0.5719844	0.2205	0.4023391	0.344	0.3849016	0.362	0.3812797	0.3605								
Remove Individual from Bottom 1 'expenses'	0.3821405	0.291	0.4409190	0.403	0.5186246	0.2715	0.4342672	0.403	0.3464083	0.3665	0.3491152	0.365	0.013	-0.06	0.002	-0.09	0.033	0.027	-0.1061786549	
Remove Individual from Bottom 2 'shared_rec	0.4331700	0.3095	0.3326003	0.3025	0.5382775	0.225	0.3245714	0.284	0.3827775	0.3845	0.3812405	0.378	-0.05	0.143	0.029	0.137	-0.02	-0.01	0.2342842746	
Remove Individual from Bottom 4 'to_poi_ratio	0.4179523	0.298	0.3980827	0.3945	0.5206611	0.2205	0.4050632	0.4	0.4387229	0.426	0.4389865	0.4245	-0.02	-0.01	0.051	-0.05	-0.11	-0.12	-0.1683013778	
Remove Individual from Bottom 5 'bonus'	0.4208494	0.2725	0.4114318	0.3635	0.4568273	0.2275	0.4189342	0.3695	0.3710691	0.354	0.3696682	0.351	-0.00	0.004	0.108	-0.04	0.021	0.021	0.08506913705	
Remove Individual from Bottom 6 'exercised_	0.3522650	0.2605	0.3658286	0.3565	0.4570519	0.2155	0.3679586	0.356	0.3066088	0.283	0.3163481	0.298	0.073	0.056	0.119	0.022	0.157	0.127	0.429967919	
Sans 'deferred_income', 'to_poi_ratio	0.4179523	0.298	0.4059505	0.4025	0.5302013	0.237	0.3976697	0.3925	0.4367934	0.425	0.4350515	0.422								
Remove Individual from Bottom 1 'expenses'	0.4074074	0.2805	0.3622497	0.38	0.5816216	0.269	0.3655040	0.3825	0.4272823	0.4025	0.4264392	0.4	0.028	0.066	-0.08	0.042	0.032	0.030	0.08500213518	
Remove Individual from Bottom 2 'shared_rec	0.4820384	0.2885	0.4066193	0.43	0.6031128	0.31	0.4102325	0.441	0.4246778	0.4285	0.4222113	0.4315	-0.05	-0.02	-0.14	-0.06	0.008	0.003	-0.2811137473	
Remove Individual from Bottom 5 'bonus'	0.4387672	0.2705	0.3575	0.429	0.4408482	0.1975	0.3549729	0.4265	0.4009287	0.3885	0.4037170	0.391	0.006	0.021	0.128	0.008	0.072	0.062	0.2385501732	
Remove Individual from Bottom 6 'exercised_	0.3830845	0.231	0.3905263	0.371	0.3680297	0.1485	0.3811280	0.3615	0.3145743	0.327	0.3109726	0.3245	0.101	0.046	0.250	0.047	0.220	0.221	0.6672243207	
Remove 'deferred_income' Third of the 3 Identified Features																				
Sans 'bonus' 5 features	0.4843636	0.333	0.3920581	0.3505	0.5487053	0.2225	0.3843630	0.3515	0.3713278	0.316	0.3649041	0.314								
Remove Individual from Bottom 1 'expenses'	0.5233918	0.358	0.3791844	0.3115	0.5097192	0.236	0.3659730	0.299	0.4381350	0.3665	0.4409118	0.3675	-0.06	0.051	0.025	0.070	-0.11	-0.12	-0.03308561945	
Remove Individual from Bottom 2 'shared_rec	0.5251353	0.3395	0.4170087	0.3555	0.5341365	0.1995	0.4171668	0.3475	0.4293044	0.3765	0.4288184	0.372	-0.04	-0.02	0.037	-0.02	-0.11	-0.12	-0.1869340082	
Remove Individual from Bottom 3 'deferred_in	0.4208494	0.2725	0.4125282	0.3655	0.4541947	0.2355	0.4252548	0.3755	0.3703509	0.3535	0.3675847	0.347	0.124	-0.03	0.081	-0.06	-0.03	-0.03	0.06863978105	
Remove Individual from Bottom 4 'to_poi_ratio	0.4892857	0.3425	0.3653671	0.403	0.4786995	0.2135	0.3583106	0.3945	0.3780560	0.317	0.3808383	0.318	-0.01	-0.02	0.079	-0.01	-0.00	-0.01	0.01409886806	
Remove Individual from Bottom 6 'exercised_	0.3401015	0.1675	0.3603158	0.365	0.4161290	0.1935	0.3612334	0.369	0.3084161	0.295	0.3102536	0.2935	0.309	0.017	0.161	0.005	0.083	0.075	0.5781219645	
Sans 'bonus', 'shared_receipt_with_poi' 4 feat	0.5251353	0.3395	0.4163742	0.356	0.5239898	0.2075	0.4174584	0.3515	0.4307518	0.381	0.4373918	0.379								
Remove Individual from Bottom 1 'expenses'	0.5310936	0.3715	0.244	0.183	0.3740554	0.1485	0.2507082	0.177	0.3060046	0.265	0.3078271	0.2635	-0.03	0.345	0.208	0.341	0.240	0.245	1.098347893	
Remove Individual from Bottom 3 'deferred_in	0.4950584	0.2755	0.3112931	0.266	0.3888242	0.167	0.3034441	0.2555	0.3526346	0.3045	0.3500576	0.3035	0.094	0.195	0.175	0.210	0.154	0.162	0.8294552058	
Remove Individual from Bottom 4 'to_poi_ratio	0.5622119	0.366	0.5159655	0.509	0.4849498	0.2175	0.5048543	0.494	0.4055555	0.365	0.4154187	0.3745	-0.06	-0.25	0.029	-0.22	0.041	0.026	-0.4758274919	
Remove Individual from Bottom 6 'exercised_	0.4222222	0.1615	0.3534115	0.3315	0.3759086	0.181	0.3509513	0.332	0.2755555	0.279	0.2800798	0.2805	0.280	0.087	0.174	0.086	0.257	0.255	0.8861604969	
Reverse Testing of Optimal Features																				
['exercised_stock_options' 'expenses', 'deferred_income']	0.5622119	0.366	0.504	0.504	0.4669509	0.219	0.5030674	0.492	0.4074279	0.3675	0.4190317	0.3765							Positive delta indicates feature does not improve score	
Plus 'total_stock_value'	0.5453910	0.3905	0.4261867	0.4085	0.4994026	0.209	0.4441558	0.4275	0.3199554	0.287	0.3228346	0.287	-0.00	0.173	-0.02	0.123	0.167	0.185	0.4345666725	
Plus 'bonus'	0.5160567	0.3455	0.3888599	0.3735	0.5349544	0.264	0.3894790	0.385	0.3729641	0.3435	0.3705308	0.342	0.066	0.245	-0.11	0.220	0.058	0.083	0.4783440508	
Plus 'salary'	0.5649717	0.35	0.4105470	0.4165	0.4434072	0.19	0.4122023	0.4155	0.2446351	0.228	0.2422459	0.2265	0.013	0.180	0.052	0.167	0.302	0.326	0.7163947361	
Plus 'to_poi_ratio'	0.5251353	0.3395	0.4132086	0.3535	0.5367741	0.208	0.4137323	0.3525	0.4308943	0.371	0.4312714	0.3765	0.063	0.241	-0.05	0.228	-0.02	-0.01	0.4479134727	
Plus 'long_term_incentive'	0.5437368	0.3885	0.4614243	0.4665	0.5023419	0.2145	0.4587246	0.464	0.4106884	0.4265	0.4122722	0.43	-0.00	0.080	-0.03	0.072	-0.06	-0.04	0.05524207262	
Plus 'shared_poi_ratio'	0.5699745	0.336	0.4199806	0.433	0.6529814	0.334	0.4274432	0.433	0.3904873	0.3325	0.3981264	0.34	0.022	0.155	-0.30	0.134	0.051	0.057	0.06279116727	
Plus 'restricted_stock'	0.5742074	0.3985	0.3487332	0.351	0.3950777	0.1525	0.3468875	0.3455	0.3014508	0.2805	0.3050213	0.2855	-0.04	0.308	0.138	0.302	0.192	0.205	0.8978015336	
Plus 'total_payments'	0.4396024	0.2875	0.3681247	0.425	0.5076252	0.233	0.3686036	0.425	0.3720207	0.359	0.3709260	0.3585	0.201	0.214	-0.05	0.201	0.043	0.066	0.6066815474	
Plus 'shared_receipt_with_poi'	0.4892857	0.3425	0.3593466	0.396	0.4779332	0.222	0.3603644	0.3955	0.3787969	0.318	0.3795359	0.319	0.096	0.252	-0.01	0.239	0.078	0.096	0.6524313777	
Plus 'loan_advances'	0.2457663	0.283	0.5081632	0.498	0.4844221	0.241	0.5094920	0.4965	0.3614589	0.332	0.3570274	0.3315	0.399	0.001	-0.03	-0.01	0.081	0.107	0.4323556485	
Plus 'from_poi_to_this_person'	0.5050287	0.3515	0.3875739	0.393	0.4900117	0.2085	0.4028056	0.402	0.3934343	0.3895	0.3983656	0.39	0.071	0.227	-0.01	0.190	-0.00	0.007	0.468803958	
Plus 'other'	0.5181818	0.285	0.4948453	0.48	0.5103785	0.209	0.4979508	0.486	0.3245526	0.3265	0.3165754	0.318	0.125	0.033	-0.03	0.011	0.123	0.160	0.2597491707	
Plus 'from_poi_ratio'	0.5312264	0.353	0.4742923	0.4105	0.5	0.1945	0.4655270	0.4085	0.3494047	0.2935	0.3518518	0.2945	0.043	0.123	-0.00	0.121	0.132	0.149	0.4117077335	
Plus 'from_this_person_to_poi'	0.4622132	0.3425	0.4853333	0.455	0.5170789	0.2195	0.4908136	0.4675	0.4377630	0.364	0.4390539	0.362	0.123	0.067	-0.05	0.036	-0.02	-0.00	0.1504561615	
Plus 'to_messages'	0.4995898	0.3045	0.3981481	0.43	0.5117581	0.2285	0.3963922	0.4285	0.3798681	0.317	0.3797468	0.315	0.124	0.179	-0.05	0.170	0.078	0.100	0.4979018551	

Enron POI Detection Selection Chart

Plus restricted_stock_deferred'	0.1629062	1	0.5060913	0.4985	0.5058593	0.259	0.5002578	0.485	0.3620405	0.33	0.3622222	0.326	-0.23	0.003	-0.07	0.009	0.082	0.107	-0.2174970867
Plus 'from_messages'	0.5645967	0.3955	0.4362511	0.4585	0.4845814	0.22	0.4377945	0.4645	0.3859263	0.351	0.3885869	0.3575	-0.03	0.113	-0.01	0.092	0.038	0.049	0.1935080933
Plus 'deferral_payments'	0.5532087	0.3405	0.4888324	0.4815	0.4825102	0.2345	0.4858012	0.479	0.4069119	0.365	0.4052251	0.3645	0.034	0.037	-0.03	0.030	0.003	0.025	0.07439366921
Plus 'director_fees'	0.1621402	1	0.4747327	0.4885	0.4644230	0.2415	0.4667644	0.4775	0.3827493	0.355	0.3831168	0.354	-0.23	0.044	-0.01	0.050	0.037	0.058	-0.1211514594
Miscellaneous/Legacy Features																			
[exercised_stock_options', 'shared_receipt_with_poi', 'bonus']	0.4074074	0.2805	0.3661176	0.389	0.5767955	0.261	0.3638086	0.384	0.4274364	0.4035	0.4258271	0.399							
[exercised_stock_options', 'shared_receipt_with_poi', 'to_poi_ratio', 'expenses']	0.42085	0.2725	0.41422	0.367	0.47314	0.229	0.42497	0.3795	0.36924	0.3565	0.41311	0.353							
[exercised_stock_options', 'to_poi_ratio']	0.53194	0.254	0.34241	0.283	0.44604	0.2025	0.3427	0.2865	0.35458	0.3115	0.36838	0.212							
[exercised_stock_options', 'to_poi_ratio', 'bonus']	0.46781	0.287	0.31618	0.295	0.54898	0.283	0.31132	0.297	0.37701	0.351	0.48135	0.3485							
[exercised_stock_options', 'to_poi_ratio', 'expenses']	0.49506	0.2755	0.30357	0.255	0.40337	0.1795	0.30893	0.2595	0.34658	0.2965	0.38201	0.2485							
[exercised_stock_options', 'to_poi_ratio', 'shared_poi_ratio']	0.52365	0.321	0.27778	0.2075	0.44084	0.2105	0.2828	0.208	0.36373	0.357	0.45203	0.278							
[exercised_stock_options', 'to_poi_ratio', 'shared_receipt_with_poi']	0.50195	0.2575	0.43919	0.2925	0.49947	0.2365	0.44571	0.2935	0.55164	0.462	0.42159	0.289							
Email Features																			
email_2	0.0654	0.024	0.33612	0.362	0.30448	0.299	0.354	0.394	0.38837	0.454	0.38751	0.453							
email_1: 'to_poi_ratio' only	0.03077	0.002	0.22483	0.326	0.18462	0.252	0.22483	0.326	0.22483	0.326	0.22483	0.326							
Financial and E-mail Features																			
	GaussianNB		Decision Tree		Random Forest		AdaboostDTC		PCA-DTC		Tuned-PCA-DTC:								
	Precision	Recall	Precision	Recall	Precision	Recall	Precision	Recall	Precision	Recall	Precision	Recall							
Correlated > 0.2 Financial Only (10 Features)	0.18703	0.2235	0.27	0.275	0.41873	0.152	0.27778	0.28	0.29558	0.2975	0.19378	0.349							
Correlated > 0.2 E-mail Only (3 Features)	0.09625	0.1	0.2599	0.302	0.29922	0.231	0.23892	0.275	0.20925	0.285	0.20395	0.289							
Original Email Features	0.01023	0.009	0.19103	0.277	0.18253	0.117	0.19343	0.271	0.19651	0.349									
Created Email Features	0.18796	0.206	0.23451	0.318	0.31638	0.224	0.23229	0.318	0.20789	0.29									